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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,602	07/24/2003	Shun-Fa Yang	3624-0119P	7957
2292	7590	07/08/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PASSANITI, SEBASTIANO	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/625,602	Applicant(s) YANG ET AL.	
	Examiner Sebastiano Passaniti	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-11 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office action is responsive to communication received 07/24/2003 – application papers filed.

Claims 1-11 are pending.

Following is an action on the MERITS:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakahara. As to claim 1, note club head body (1) including a weight member (4) welded to the body. The weight (4) is made from a tungsten alloy, which has a melting point higher than the titanium material from which the body is made. As to claim 4, here again, the club head body is made of titanium (col. 2, lines 58-65).

Claims 2, 3, 5, 6, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahara in view of Shira. The patent to Nakahara fails to evince a weight member that includes tungsten, tantalum, molybdenum and niobium, or a body formed of low carbon steel, low alloy steel or stainless steel. Clearly, the applicant has

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not invented these materials. Rather, the applicant has selected known materials based upon their natural characteristics. The Shira teaching points out that when welding is used as a mechanism through which club head parts are integrated, the optimum processes often depend upon the materials and thicknesses being joined (col. 3, line 57 through col. 4, line 10). In addition, Shira exemplifies that it is common to employ welding as a means to join the various club headpieces in the case where, for example, at least one piece of the club head is manufactured through a powder metallurgy technique (col. 3, lines 33-39). In this case, the applicant has selected a combination of materials displaying diverse melting points so that the two materials may be welded together. This concept is the essence of the primary Nakahara reference. Clearly, a myriad of combinations of materials exist from which the skilled artisan would have found it obvious to select at least two different materials, one for the club head body and one for the weighted portion, to join together. It has long been established that the selection of a known material to take advantage of the natural qualities of such a known material would have been obvious to one of ordinary skill in the art. See In re Hopkins 145 USPQ 140. Moreover, it is noted that the welding operation detailed in claim 1 and the powder metallurgy operation highlighted in claim 3 are both indicators of the method by which the claimed club head is to be constructed. As the claims set forth a structure, the method limitations do not further limit the structure, since other diverse means for joining the club head body and weight elements of the Nakahara device are evident, whereby the final product of a club head joined to a weight assembly exactly resembles the club head device formed by the claimed welding and powder metallurgy processes.

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Specific to claim 9, Shira further obviates the use of a channel (20) that is filled with welding material. As to claims 10 and 11, if one considers the elements (2, 6) in Shira as weight members, then it is clear that the extension (10) protruding from one end of each of the weight members forms a shoulder having an inclined face. To make use of such an arrangement within the Nakahara assembly in order to prevent shifting of the mating club head elements during the welding operation would have been obvious to the skilled artisan for the reasons advanced in Shira. See col. 4, lines 36-49 in Shira for an explanation of the purpose of the extensions (10).

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahara in view of Chiu. The patent to Nakahara differs from the claimed invention in that Nakahara does not detail a portion of the club head forming a flange that additionally serves as the welding material. Chiu shows it to be old in the art to join two parts of a club head, namely the striking face and the club head body, by using a flange material (12) that is the same material used in the fabrication of the club head body. See the detailed description in Chiu, wherein a complete explanation is provided for the manner of welding the striking plate (20) to the club head main body (10). Chiu indicates that the weld flange reduces the amount of weld deformation, eliminates the need for further bulky welding material, hastens the weld completion time and reduces the cost of the welding operation (col. 2, lines 5-31). In view of the patent to Chiu, it would have been obvious to modify the device in the cited art reference to Nakahara by incorporating flange material as part of the sole plate (3), for the reasons advanced in

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Chiu, wherein the flange would accommodate a welding operation after the weight member (4) has been aligned within the recess of the sole.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lu, Deshmukh and Takeda show various assemblies in which a weight member is attached to the sole portion of a club head. Note Figure 2 in Schmidt.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 703-308-1006. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sebastiano Passaniti
Primary Examiner
Art Unit 3711

S.Passaniti/sp
July 7, 2004